IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A lithographic ~~projection~~ apparatus comprising:

~~a radiation system configured to provide a projection beam of radiation;~~

a support structure configured to support programmable patterning structure, the programmable patterning structure being configurable to pattern ~~the projection~~ a beam of radiation according to a desired pattern;

a substrate table configured to hold a substrate; and

a projection system configured to project the patterned beam onto a target portion of the substrate,

wherein the programmable patterning structure includes a plurality of reflective elements, each reflective element including upper and lower distributed Bragg reflectors having a separation relation selectable from among at least a first separation relation and a second separation relation[[;]], and

wherein, when the first separation relation is selected, a reflectivity of the reflective element at a wavelength of the ~~projection~~ beam of radiation is relatively low, and when the second separation relation is selected, a reflectivity of the reflective element at a wavelength of the ~~projection~~ beam of radiation is relatively high, and

wherein at least two among the plurality of reflective elements have a common distributed Bragg reflector.

2. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, wherein, when the first separation relation is selected, the upper and lower distributed Bragg reflectors are relatively positioned such that reflections of the ~~projection~~ beam of radiation interfere destructively, and

wherein, when the second separation relation is selected, the upper and lower distributed Bragg reflectors are relatively positioned such that reflections of the ~~projection~~ beam of radiation interfere constructively.

3. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, wherein at least two of the plurality of reflective elements have a common upper distributed Bragg reflector.

4. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, wherein a difference in the distance between a reflecting layer of the upper distributed Bragg reflector and a reflecting layer of the lower distributed Bragg reflector between the first and second separation relations is substantially equal to one-quarter of a wavelength of the ~~projection~~ beam of radiation.

5. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, wherein the ~~projection~~ beam of radiation is extreme ultraviolet radiation.

6. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, said apparatus ~~further~~ comprising an actuator configured to set a separation relation of at least one of the reflective elements to one of the first separation relation, the second separation relation, and at least one separation relation between the first and second separation relations.

7. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 6, wherein the actuator includes a piezoelectric element.

8. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, said apparatus ~~further~~ including a piezoelectric element that is common to a set including at least two of the reflective elements, and

wherein each reflective element of the set includes an electrode configured to apply a signal to cause a piezoelectric effect in the piezoelectric element that is substantially local to the reflective element.

9. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 1, wherein at least one of the plurality of reflective elements is configured to use an electrostatic force to adjust a separation relation between the upper and lower distributed Bragg reflectors.

10. (Currently Amended) A lithographic ~~projection~~ apparatus comprising:

~~a radiation system configured to provide a projection beam of radiation;~~

a support structure configured to support programmable patterning structure, the programmable patterning structure being configured to pattern ~~the projection~~ a beam of radiation according to a desired pattern;

a substrate table configured to hold a substrate; and

a projection system configured to project the patterned beam onto a target portion of the substrate,

wherein the programmable patterning structure includes a plurality of reflective elements, each reflective element including a distributed Bragg reflector, and

wherein a position of each of a set of the plurality of reflective elements is selectably adjustable to create a phase difference between a reflection from the reflective element and a reflection from another of the plurality of reflective elements, and

wherein at least two among the plurality of reflective elements have a common distributed Bragg reflector.

11. (Currently Amended) The lithographic ~~projection~~ apparatus according to claim 10, ~~wherein at least two among the set of reflective elements have a common distributed Bragg reflector, and~~

wherein the common distributed Bragg reflector is configured to be locally distortable such that a selected position of the common distributed Bragg reflector differs between the at least two reflective elements.

12. (Currently Amended) A device manufacturing method comprising ~~the steps of~~:

~~providing a substrate that is at least partially covered by a layer of radiation-sensitive material;~~

~~providing a projection beam of radiation using a radiation system;~~

using a programmable patterning structure to endow ~~the projection~~ a beam of radiation with a desired pattern in its cross-section; and

projecting the patterned beam ~~of radiation~~ onto a target portion of ~~the~~ a layer of radiation-sensitive material that at least partially covers a substrate,

wherein the programmable patterning structure includes a plurality of reflective elements, each reflective element including upper and lower distributed Bragg reflectors having a separation relation selectable from among at least a first separation relation and a second separation relation[[;]] , and

wherein, when the first separation relation is selected, a reflectivity of the reflective element at a wavelength of the ~~projection~~ beam of radiation is relatively low, and when the second separation relation is selected, a reflectivity of the reflective element at a wavelength of the ~~projection~~ beam of radiation is relatively high, and

wherein at least two among the plurality of reflective elements have a common distributed Bragg reflector.

13. (Currently Amended) The device manufacturing method according to claim 12, wherein, when the first separation relation is selected, the upper and lower distributed Bragg reflectors are relatively positioned such that reflections of the ~~projection~~ beam of radiation interfere destructively, and

wherein, when the second separation relation is selected, the upper and lower distributed Bragg reflectors are relatively positioned such that reflections of the ~~projection~~ beam of radiation interfere constructively.

14. (Original) The device manufacturing method according to claim 12, wherein at least two of the plurality of reflective elements have a common upper distributed Bragg reflector.

15. (Currently Amended) The device manufacturing method according to claim 12, wherein a difference in the distance between a reflecting layer of the upper distributed Bragg reflector and a reflecting layer of the lower distributed Bragg reflector between the first and second separation relations is substantially equal to one-quarter of a wavelength of the ~~projection~~ beam of radiation.

16. (Currently Amended) The device manufacturing method according to claim 12, wherein the ~~projection~~ beam of radiation is extreme ultraviolet radiation.

17. (Original) The device manufacturing method according to claim 12, wherein said using programmable patterning structure includes using an actuator to set a separation relation of at least one of the reflective elements to one of the first separation relation, the second separation relation, and at least one separation relation between the first and second separation relations.

18. (Original) The device manufacturing method according to claim 17, wherein the actuator includes a piezoelectric element.

19. (Original) The device manufacturing method according to claim 12, wherein said using programmable patterning structure includes using a piezoelectric element that is common to a set including at least two of the reflective elements, and

wherein each reflective element of the set includes an electrode configured to apply a signal to cause a piezoelectric effect in the piezoelectric element that is substantially local to the reflective element.

20. (Original) The device manufacturing method according to claim 12, wherein said using programmable patterning structure includes using an electrostatic force to adjust a separation relation between the upper and lower distributed Bragg reflectors of at least one of the plurality of reflective elements.

21. (New) The lithographic projection apparatus according to claim 1, wherein the common distributed Bragg reflector is configured to be locally distortable such that a selected position of the common distributed Bragg reflector differs between the at least two among the plurality of reflective elements.

22. (New) The lithographic apparatus according to claim 10, wherein the beam of radiation is extreme ultraviolet radiation.

23. (New) The lithographic apparatus according to claim 10, wherein at least two among the set of reflective elements have a common distributed Bragg reflector.

24. (New) The lithographic apparatus according to claim 10, wherein a position of each of the set of the plurality of reflective elements is selectably adjustable between a first position and a second position,

such that when the reflective element is in the first position, a reflection from the reflective element interferes destructively with a reflection from another of the plurality of reflective elements, and

such that when the reflective element is in the second position, a reflection from the reflective element interferes constructively with a reflection from the other of the plurality of reflective elements.

25. (New) The lithographic apparatus according to claim 24, wherein a difference in the distance between a reflecting layer of the reflective element and a reflecting layer of the other of the plurality of reflective elements between the first and second positions is substantially equal to one-quarter of a wavelength of the beam of radiation.

26. (New) The lithographic apparatus according to claim 24, said apparatus further comprising an actuator configured to set the selectably adjustable position of the reflective element to one of the first position, the second position, and at least one position between the first and second positions.

27. (New) The lithographic apparatus according to claim 26, wherein the actuator includes a piezoelectric element.

28. (New) The lithographic apparatus according to claim 24, wherein said apparatus is configured to use an electrostatic force to selectably adjust a position of at least one of the set of the plurality of reflective elements with respect to another of the plurality of reflective elements.

29. (New) The lithographic apparatus according to claim 10, said apparatus including a piezoelectric element that is common to at least two of the plurality of reflective elements,

wherein each of said at least two reflective elements includes an electrode configured to apply a signal to cause a piezoelectric effect in the piezoelectric element that is substantially local to the reflective element.

30. (New) A device manufacturing method comprising:

using a programmable patterning structure to endow a beam of radiation with a desired pattern in its cross-section; and

projecting the patterned beam onto a target portion of a layer of radiation-sensitive material that at least partially covers a substrate,

wherein the programmable patterning structure includes a plurality of reflective elements, each reflective element including a distributed Bragg reflector, at least two among the plurality of reflective elements having a common distributed Bragg reflector, and

wherein said using a programmable patterning structure comprises selectably adjusting a position of each of a set of the plurality of reflective elements to create a phase difference between a reflection from the reflective element and a reflection from another of the plurality of reflective elements.

31. (New) The device manufacturing method according to claim 30, said method comprising locally distorting the common distributed Bragg reflector such that a selected position of the common distributed Bragg reflector differs between the at least two reflective elements.

32. (New) The device manufacturing method according to claim 30, wherein the beam of radiation is extreme ultraviolet radiation.

33. (New) The device manufacturing method according to claim 30, wherein at least two among the set of reflective elements have a common distributed Bragg reflector.

34. (New) The device manufacturing method according to claim 30, wherein said using a programmable patterning structure comprises selectably adjusting a position of each of the set of the plurality of reflective elements between a first position and a second position,

wherein, when the reflective element is in the first position, a reflection from the reflective element interferes destructively with a reflection from another of the plurality of reflective elements, and

wherein, when the reflective element is in the second position, a reflection from the reflective element interferes constructively with a reflection from the other of the plurality of reflective elements.

35. (New) The device manufacturing method according to claim 34, wherein a difference in the distance between a reflecting layer of the reflective element and a reflecting layer of the other of the plurality of reflective elements between the first and second positions is substantially equal to one-quarter of a wavelength of the beam of radiation.

36. (New) The device manufacturing method according to claim 34, wherein said using a programmable patterning structure comprises using an actuator to set the selectably adjustable position of the reflective element to one of the first position, the second position, and at least one position between the first and second positions.

37. (New) The device manufacturing method according to claim 36, wherein said using an actuator comprises using a piezoelectric element to set the selectably adjustable position of the reflective element.

38. (New) The device manufacturing method according to claim 34, wherein said using a programmable patterning structure comprises using an electrostatic force to selectably adjust a position of at least one of the set of the plurality of reflective elements with respect to another of the plurality of reflective elements.

39. (New) The device manufacturing method according to claim 30, wherein said programmable patterning structure includes a piezoelectric element that is common to at least two of the plurality of reflective elements, and

wherein said using a programmable patterning structure comprises applying a signal to cause a piezoelectric effect in the piezoelectric element that is substantially local to one of the at least two reflective elements.

40. (New) A lithographic apparatus comprising:

a support structure configured to support programmable patterning structure, the programmable patterning structure being configured to pattern a beam of radiation according to a desired pattern;

a substrate table configured to hold a substrate; and

a projection system configured to project the patterned beam onto a target portion of the substrate,

wherein the programmable patterning structure includes a plurality of reflective elements, each reflective element including a distributed Bragg reflector, and

wherein the programmable patterning structure includes a piezoelectric element configured to adjust a position of at least one of a set of the plurality of reflective elements to create a phase difference between a reflection from the at least one reflective element and a reflection from another of the plurality of reflective elements.

41. (New) The lithographic apparatus according to claim 40, wherein the piezoelectric element is configured to adjust a position of each of the set of the plurality of reflective elements between a first position and a second position,

such that when the reflective element is in the first position, a reflection from the reflective element interferes destructively with a reflection from another of the plurality of reflective elements, and

such that when the reflective element is in the second position, a reflection from the reflective element interferes constructively with a reflection from the other of the plurality of reflective elements.

42. (New) The lithographic apparatus according to claim 41, wherein a difference in the distance between a reflecting layer of the reflective element and a reflecting layer of the other of the plurality of reflective elements between the first and second positions is substantially equal to one-quarter of a wavelength of the beam of radiation.

43. (New) The lithographic apparatus according to claim 41, wherein the piezoelectric element is configured to adjust a position of each of the set of the plurality of reflective elements between the first position, the second position, and at least one position between the first and second positions.

44. (New) The lithographic apparatus according to claim 40, wherein said piezoelectric element is common to at least two of the plurality of reflective elements,

wherein each of said at least two reflective elements includes an electrode configured to apply a signal to cause a piezoelectric effect in the piezoelectric element that is substantially local to the reflective element.